

REMARKS

Claim 5 has been canceled.

Claims 1-4 and 6-9 are pending.

Claim Rejections

Applicant has filed this response with a Request For Continued Examination. Applicant has presented many of the same arguments as presented in a previous response because Applicant has requested clarification on certain elements of the rejection. The Final Office Action did not supply these clarifications.

Applicant continues to generally traverse the following rejections on the basis that Examiner has previously issued an Office Action on May 9, 2003, which rejected the original Claims 1-8 on the basis of both novelty and obviousness using Thomson (US Pat. 4,631,971) and a combination of Thomson and Pitassi et al (US Pat. 4,889,013). These rejections were thoroughly addressed by Applicant in a response filed September 8, 2003. By having rejected the original Claims 1-8 on the basis of thoroughly examined and validly issued patents, Examiner appears to have admitted that the utility and enablement requirements have been clearly met. Applicant asserts this position. Applicant simply amended the Claims in order to address the novelty and obviousness rejections. Applicant is perplexed how these amendments now render Applicant's claimed invention "inoperative" and one that "violates the laws of physics". Applicant requests clarification on which of the amended elements of the Claims now renders the claimed invention inoperative and in violation of the laws of physics. Applicant respectfully requests that clarification that if Examiner believes that the

combination suggested in the Office Action is enabled and results in Applicant's claimed invention, how can Applicant's claimed invention not be enabled. However, Applicant has addressed the rejections below in order to be responsive and to avoid delaying prosecution.

35 U.S.C. §112

The Office Action rejected Claims 1-4 and 6-9 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. Applicant respectfully traverses the rejection. Applicant has disclosed a generator that takes an input force changes phase relationships of internal forces generated on internal gears. Nothing disclosed by Applicant possibly violates the laws of physics. In simplest terms, force is defined by $F=ma$, which means that force is defined by a mass under a constant acceleration. Rotational forces, torque is generally defined by $\tau=r\omega$, where r is the radius of the arm onto which a force is applied and ω is the instantaneous linear velocity with respect to a point on the arc of rotation. It is well known that if two gears of differing radii are in engagement with one another, the torque applied by, for example, the larger gear onto the lower gear is the same (absent dissipative forces such as heat). As such, the point velocity of smaller gear will be larger according to the laws of force conservation. Furthermore, and more importantly, the phase relationship of those gears will be very different since one is now rotating faster than the other. Applicant has presented these arguments using scalar quantities rather than a full vector analysis to simplify the arguments. However, these arguments would be identical even taking into account vector quantities. The mention of phase relationships and change in forces due to these phase changes are clearly recited in the final element of Claim 1 as amended by Applicant in the prior response. Applicant further submits that although Examiner has asserted that the invention is a "space machine", whether or not the invention could be used as a component of a space vehicle does not violate the enablement requirement. In fact, such an assertion actually enables the invention by providing an example of how the invention could be implemented. However, Applicant respectfully

points out that nowhere in the specification claims or drawings does Applicant state that the machine is a space machine. Applicant respectfully points out that it is only the Examiner who has used the term “space machine”.

The Office action further rejected Claims 1-4 and 6-9 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. As described above, there are various forces throughout the device as claimed. It is well known that if a thorough force analysis is performed on a device, if there are enough directional differences within the device, that is rotations in one direction and equal rotations in the opposite direction, the net force of the device could be zero. This zero net force, does not mean that there is not movement, or forces that could be harnessed outside the device, as in Applicant’s claimed invention. Once again, Applicant believes that this is a responsive argument but requests further clarification on which elements actually support an assertion that there is a zero net force output. In fact, it is the Office Action’s position that a net zero output force results after a force is input. Nowhere in Applicant’s invention does it state that a force is absolutely reduced to zero. Besides inherent frictional forces, there is no way that the force can be reduced to zero. This faulty position is in fact a violation of Newton’s third law.

35 U.S.C. §101

The Office Action rejected Claims 1-4 and 6-9 under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility.

As described above, although in a force analysis, the net force may be zero, an output force still exists which can be manipulated to provide a drive force.

In response to Applicant's previous arguments, the Office Action stated that Applicant stated that the invention creates "a scalar vector force". Applicant simply presented the argument in scalar quantities in order to avoid the confusion of a full vector analysis. Applicant has time again stated that there is an input force, that the input force does create rotational forces which result in a non-zero net force. Applicant has time again presented sound theories from physics to support this invention. Applicant now turns to the laws of angular momentum and conservation of angular momentum. In a simple example, the precession of a child's top, the top is sent spinning about an axis. Angular momentum, $L = \mathbf{r} \times \mathbf{mv}$, now presented as a vector, is conserved and the mass about the axis of rotation is uniform. If the top had a nonuniform mass, a resultant translation would occur across the table. In Applicant's claimed invention, the eccentrics are constantly changing direction thus constantly changing angular momentum. Now, with the addition of a linear input force, as in Applicant's claimed invention, a net linear translation occurs.

Furthermore, Applicant presents Applicant's Fig. 1 that includes specific measurable quantities in order to provide an example of the functionality of the invention. As seen in the Figure 1, an upper quadrant and a lower quadrant can be defined. The upper quadrant includes a long radius of 2.375 inches and the lower quadrant includes a short radius of 0.875 inches. The radii are measured from the center of the sun gear to the rotation points of the eccentrics. This initial radius differential creates the necessary changes in angular momentum when the input force is applied. Figures 1-7 show the different phases of the invention as the rotations occur and the radii differentials that are constantly changing. Now, assuming that the masses of the eccentrics are the same, and the linear velocities are the same, the differential in the radii creates two different angular momentums. With the added feature that the radii are constantly changing, a net force is created *due to the differing angular momentums initially created*.

Applicant hereby requests a telephone interview to discuss the case.

If Examiner has any questions regarding this document, Applicant asks that Examiner contact the undersigned immediately by telephone.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Greg O'Bradovich", written over a horizontal line.

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